### **CONCORDIA UNIVERSITY**

## Council of the Faculty of Engineering and Computer Science

#### Minutes of Meeting 2004-06

#### held

## Friday, October 15, 2004, 2:00 p.m., ER-407-3

Present:	N. Esmail (Chair)	T. Fancott	W.E. Lynch
	M.O. Ahmad	T. Fevens	B. Mackenzie
	S.T. Alkass	W. Ghaly	S. Mudur
	B. Ashtakala	M.R. Hajiaboli	C. Paradisis
	S. Bergler	L. Harris	M.D. Pugh
	R. Bhat	I. Hassan	A.S. Ramamurthy
	J. Covey	S.V. Hoa	Y.R. Shayan
	M. Debbabi	N. Howe	M.R. Soleymani
	K. Demirli	J. Jasinski	C.W. Trueman
	M. Di Pietrantonio	C. Lam	M. Zaheeruddin
	(Secretary of Council)	E. Lapointe	R.G. Zmeureanu
	R. Dssouli	H.F. Î.i	

Observers:

E. Xenos (for L. Zack)

Regrets:

M. Chiem

Q. Li

R. Mizouni L. Quesnel

S. Ghaderpanah

A. Limoges

F. Khendek

R. Melkonian

1.

### Adoption of Agenda

Motion 2004-06-01

That the Agenda be adopted, as submitted (S.V. Hoa, R. Dssouli)

Vote: Carried unanimously

### 2. Adoption of the Minutes of Meeting 2004-05

The Chair advised Council members that the numbers pertaining to the following motions were incorrect:

- Motion 2004-05-03 was not indicated in the Minutes of Meeting 2004-05
- Motion 2004-05-40 was cited incorrectly as Motion 2004-05-39

Motion 2004-06-02

That the Minutes of Meeting 2004-05 (May 14, 2004) be adopted, as corrected (R. Dssouli, W.E. Lynch)

Vote: Carried unanimously

### 3. Chair's Remarks

New Building: The Chair stated that this year will be special for the Faculty of ENCS in view of the move to the New Building. As a result, Faculty Council meetings for the year 2005/06 will be held in one of the conference rooms in the New Building. The Chair considers the upcoming move a logistically complex exercise, involving 660 rooms. In this regard, the Chair requested everyone's co-operation during the impending move, which will undoubtedly create both excitement and frustration.

<u>Enrollment:</u> For the first time in the last 7 years, the Faculty has experienced a decrease in enrollment figures, losing 150 FTE's, primarily for the Fall 2004 registration. This is not surprising, considering the results from other engineering and computer science schools. PhD enrollment has increased by about 15 to 20%. On the other hand, enrollment for Master Research students has dropped drastically by about 25%. The enrollment figures for Master Course programs has remained stable.

These results represent a drop in the Faculty's budget from \$38 million to \$36.5 million – a loss of \$1.5 million. The Chair is confident that this drop in funds will not impede the Faculty from sustaining itself financially, nor cause its planning parameters to change. However, this drop will give rise to an adjustment period, and should be used as a learning exercise to determine the appropriate conclusions in order to stabilize in-funding for the years to come.

<u>Faculty Parameters:</u> This year, the hiring of 20 new professors has resulted in lower-than-average teaching loads for full-time professors — a benchmark parameter achieved by the Faculty. This trend will continue into the year 2005/06, and the Chair anticipates a reduction in the general level of teaching loads, in reflection to the number of graduate students to be supervised, which the Chair recognizes as the most labour-intensive factor involved in research work.

The other benchmark parameter achieved by the Faculty involves the lowest ratio of part-time teachers in the past 7 years. The highest ratio was attained with 250 or 270 part-time teachers. This year, with only 40 part-time instructors, the ratio of part-time to full-time teaching across the Faculty is less than 10% (i.e. 40 part-time courses versus 545 full-time courses). In the Dept of ECE, full-time teaching has reached a 95% ratio.

### 4. <u>Undergraduate Curriculum Changes</u>

4.1 Undergraduate Curriculum Change – ENGR 201: Professional Practice and Responsibility (ECFC Doc. 2004-06-01)

Dr. Lynch moved Document ECFC 2004-06-01, outlining a course change for ENGR 201, which involves adding a bi-weekly, 1-hour tutorial.

Rationale: ENGR 201 is a required course for all accredited engineering programs. Since it is taught in one section for nearly 600 students, the part-time professor teaching the course is not available to answer questions from this large number of students. The purpose of the tutorial is to give students access to a tutor who can review class material and answer students' questions.

Motion 2004-06-03

That the undergraduate curriculum change for ENGR 201, set out in Document ECFC 2004-06-01, be approved by Council (W.E. Lynch, S.V. Hoa)

Vote: Carried unanimously

4.2 Undergraduate Curriculum Changes – ESL Credits (ECFC Doc. 2004-06-02)

Dr. Lynch moved Document ECFC 2004-06-02, outlining curriculum changes for ESL credits.

Rationale: This change makes explicit in the calendar the Faculty practice of not allowing students to count language courses towards their engineering degree. This requirement is in line with accreditation guidelines.

For those registered in the Computer Science program, this change makes explicit in the calendar the Faculty practice of allowing students to use a maximum of 6 credits in language courses as general electives towards their computer science degree.

Motion 2004-06-04

That the undergraduate curriculum changes for ESL credits, set out in Document 2004-06-02, be approved by Council (W.E. Lynch, R. Bhat)

Vote: Carried unanimously

4.3 Undergraduate Curriculum Changes – INDU 440 (ECFC Doc. 2004-06-03)

Dr. Pugh explained the purpose of the curriculum change for INDU 440.

Rationale: The course title and course description changes for INDU 440 allows undergraduate students in MIE to focus on the managerial aspects of product design and development, as opposed to the technical aspects. However, since the revised

course description is similar enough to the previous description, students who have already taken INDU 440 should not take this new version. As a result, the course number is not changing.

Motion 2004-06-05

That the undergraduate curriculum changes for INDU 440, set out in Document ECFC 2004-06-03, be approved by Council (W.E. Lynch, M.D. Pugh)

Vote: Carried unanimously

# 4.4 Undergraduate Curriculum Changes – Co-op Programs (ECFC Doc. 2004-06-04)

Dr. Lynch requested Council members to append pages 2 to 11, distributed at the meeting, to Document ECFC 2004-06-04, pertaining to undergraduate curriculum changes for co-op programs. The above-mentioned document, including the newly appended pages, was moved by Dr. Lynch.

Co-op programs in the Faculty of ENCS are currently geared towards elite students. Co-op students in engineering programs are presently required to take the entire regular program in seven academic terms, instead of eight. This allows for 4 work terms, with the student completing his/her degree in the normal four academic years.

In order to make co-op more accessible, the Faculty of ENCS is moving to eight academic terms for BEng co-op students, and six academic terms for BCompSci co-op students, along with three work terms. The three work terms falls within the requirements that all co-op programs must meet.

Among less substantial changes made, the Faculty is directing students to a web site rather than a calendar section in regards to the co-op work terms. This will be more efficient in laying out transition measures for students as this change is phased in.

The Faculty is also directing students to the Student Academic Services (SAS) Unit, rather than the Department Co-op Directors. With SAS as the first contact point, Co-op Directors will be relieved of some routine work.

The co-op sections in each department are also being removed. This material is essentially the same for all programs, and is informational in nature rather than regulatory. This information will be given in the Faculty's co-op web page.

The Chair expressed his views on the co-op programs at Concordia. He stated that having been based primarily on the culture and philosophy of academic departments in the Faculty of Arts & Science, co-op programs at Concordia are regarded as elitist. Consequently, co-op students currently represent only 5% of the total ENCS student population.

Co-op programs in engineering schools across Canada are much wider and not considered as elitist, but rather a means for students to obtain practical experience of the professional world they are seeking to join. In keeping with our claim to provide the most practical education to our students, larger co-op programs need to be implemented at Concordia.

# Motion 2004-06-06

That the undergraduate curriculum changes pertaining to co-op programs, set out in Document ECFC 2004-06-04, be approved by Council. (W.E. Lynch, C.W. Trueman)

Vote: Carried unanimously

# 5. <u>Undergraduate Curriculum Changes for the Department of BCEE</u> (ECFC Doc. 2004-06-05)

Dr. Lynch moved Document ECFC 2004-06-05 pertaining to the following curriculum changes for BCEE:

Dr. Lynch outlined an editorial change to the Engineering Core section of the calendar. The proposed text should read as follows: Students in BEng (Bldg) must successfully complete BLDG 482 instead of ENGR 492 (see Section 71.20.6).

The item that is being addressed in these changes is a new CEAB requirement that options consist of significant, distinct content, and be titled with a descriptive name.

The Department's two programs has always had informal options that were in fact declared, and not enforced. It was decided that this situation needed to be modified.

In the Civil Engineering program, the Department decided to formalize its options. It is renaming Option A with a more descriptive title, as is desired by the CEAB. A tighter list of electives is given for each option, again in keeping with CEAB requirements.

With the formalizing of the Information Technology Option, it has become necessary to augment the department's offerings in this field. To this end, the core course BCEE 231 has been modified so as to cover more material and the credits are thus increased from 2.5 to 3 credits. A new technical elective CIVI 440 has also been added to provide greater weight to the Information Technology Option.

In Building Engineering, an opposite course has been taken, in that the Information Technology Option in this program is being eliminated with these courses being merely labeled as Information Technology electives open to all Building Engineering students.

These changes increase by 0.5 credits, the total number of credits in the two programs. This is because the two program cores are increased by 0.5 credits. Note that in the case of Civil Engineering, a previous error had given the total number of credits in the program core as 81.5, when it was only 81. With this increase, 81.5 credits is now correct.

Deletion of note on ACCO 220 in the Civil Engineering core has already passed Senate on May 7, 2004. It is included here for clarity.

Motion 2004-06-07

That the undergraduate curriculum changes for the Department of BCEE, set out in Document ECFC 2004-06-05, be approved by Council (W.E. Lynch, R. Bhat)

Vote: Carried unanimously

# 6. <u>Undergraduate Curriculum Changes for the Department of CSE</u> (ECFC Doc. 2004-06-06)

Dr. Lynch moved Document ECFC 2004-06-06, pertaining to undergraduate curriculum changes for the Department of CSE.

The <u>Digital Image/Sound and Computer Science</u> program was offered jointly by the Department of Computer Science and Software Engineering, and the Faculty of Fine Arts. The name of the program has changed to <u>Computation Arts and Computer Science</u>, and is now jointly offered by CSE and the Department of Design and Computation Arts. As a result, Section 71.80 of the Calendar needs to be updated to reflect these name changes. Also, details of the Fine Arts component of the program should only appear in one place in the Calendar to avoid inconsistency when changes are made.

Students have frequently failed to understand the sections of the Calendar related to the Faculty Exclusion List (of courses that cannot be taken for credit by students in a BCompSci program) and the requirements for the Computer Applications option. Some of the confusing text has been moved from the program requirements themselves, to the Notes following it. The Notes have been extended to indicate clearly which courses cannot be taken for credit.

The proposed text for All INTE courses on page 9 of the document should read as follows: All INTE courses with the exception of INTE 270, 275 or INTE 392

The course description for COMP 451 Database Design has been revised to reflect recent advances in the field. A two-hour scheduled laboratory has also been added.

COMP 446 Designing Programs with C++ will be offered as an elective for the Software Engineering Program.

Motion 2004-06-08

That the undergraduate curriculum changes for the Department of CSE, set out in Document ECFC 2004-06-06, be approved by Council (W.E. Lynch, R. Bhat)

Vote: Carried unanimously

# 7. <u>Undergraduate Curriculum Changes for the Department of MIE</u> (Document ECFC 2004-06-07)

Dr. Pugh explained the final changes made to MECH 211 for the 2005/06 Calendar, which supercede the changes previously submitted.

This course has been modified to:

- a) increase lecture hours from two to three hours per week to improve instruction
- b) replace the "laboratory" with increased tutorial sessions including computer aided drawing practice
- c) reflect a change in the course content, in light of emphasis on "Design Philosophy" in these programs

### Resource Implications

One full instructor course assignment will be required rather than two-thirds, as the instructor contact hours are raised from two to three hours per week

Additional TA will be required and lab instructor removed as a two-hour lab and one-hour tutorial are being replaced with a two-hour tutorial (per week). The department will introduce a CAD Assistant-on-Duty (similar to Programmer-on-Duty) to provide the assistance previously covered in laboratories.

Motion 2004-06-09 That the undergraduate curriculum changes for the Department of MIE, set out in Document ECFC 2004-06-07, be approved by Council (W.E. Lynch, S.V. Hoa)

## 8. <u>Undergraduate Curriculum Grading Regulations</u> (ECFC Doc. 2004-06-08)

To date, changes made to the grading regulations outlined in the above-mentioned document, have only been accepted by the Faculty of Arts and Science. Since not yet approved by the Academic Planning Committee (APC), Dr. Lynch presented Document ECFC 2004-06-08 to the Council members, "in principle". The changes to the grading procedures and regulations outlined in this document include:

- Late Completion of Courses with INC Notations Section 16.3.6
- Details on new IP (In Progress) grade Section 16.3.7
- Renumbering subsequent sections after adding IP section as 16.3.7

Before accepting these changes, Council members agreed to table Document ECFC 2004-06-08, namely to discuss what constitutes an Incomplete course; in which cases should an "INC" grade be assigned...etc. Dr. Lynch will advise the Faculty of A&S with regards to the Council's decision to table this motion.

## 9. Graduate Curriculum Changes (Document ECFC 2004-06-09)

Dr. Bhat moved the above-mentioned document regarding the following graduate slot course proposals from the Departments of ECE, MIE, and CSE:

#### Department of ECE

 new slot course ELEC 691X Machine Learning, Theory and Engineering Applications

# Motion 2004-06-10

That the graduate curriculum change for the Department of ECE, set out in Document ECFC 2004-06-09, be approved by Council (R. Bhat, W.E. Lynch)

Vote: Carried unanimously

### Department of MIE

new slot course **MECH 691X** Computer Control of Aerospace Systems
Type of Change: [X] Other – Specify: Slot. This is NOT a New Course

# Motion 2004-06-11

That the graduate curriculum change for the Department of MIE, set out in Document ECFC 2004-06-09, be approved by Council (R. Bhat, S.V. Hoa)

Vote: Carried unanimously

### Department of CSE

- new slot course COMP 691X Bio-informatics Applications of Machine Learning
   Type of Change: [X] Other Specify: Slot. This is NOT a New Course
- new slot course COMP 791X Knowledge-Based Bio-informatics
   Type of Change: [X] Other Specify: Slot. This is NOT a New Course

# Motion That the graduate curriculum changes for the Department of CSE, set out in Document ECFC 2004-06-09, be approved by Council (R. Bhat, C. Lam)

Vote: Carried unanimously

10. Ratification of Faculty Representative on the Council of the School of Graduate Studies

Motion 2004-06-13

That the election of Dr. S. Bergler as Faculty Representative on the Council of the School of Graduate Studies for a 3-year term, up to May 31, 2007, be ratified by Council (I. Hassan, M.D. Pugh)

Vote: Carried unanimously

11. Other Business:

12. Adjournment:

The meeting was adjourned at 3:45 p.m.

Mary Di Pietrantonio Secretary of Council